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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,082	07/30/2003	Hea-Chun Lee	21C-0056	2199
7590 06/23/2005 CANTOR COLBURN LLP 55 Griffin Road South Bloomfield, CT 06002			EXAMINER HAN, JASON	
			ART UNIT 2875	PAPER NUMBER

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/632,082	Applicant(s) LEE ET AL.	
	Examiner Jason M. Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 14-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to Claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.
-

The following claims have been rejected in light of the specification, but rendered the broadest interpretation as construed by the examiner [MPEP 2111].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6-9, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Mazis (U.S. Patent 4504891).
3. With regards to Claim 1, Mazis discloses a lamp assembly including:
 - At least two lamps inherently installed into sockets, whereby the lamps being of a fluorescent bulb type [Column 2, Lines 13-16], which are commonly known in the art and inherently provide a fluorescent layer formed on an inner surface of the lamp body, a discharge gas disposed in the body, first and second electrodes for providing the lamp body with discharge voltages; and

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- A first board [Figures 1-4: (23)] having a flat plate shape, and being coupled to the first electrode to provide the first electrode with a first discharge voltage.
4. With regards to Claim 2, Mazis discloses the first board including:
- A first insulated body [Figure 3: (44)]
 - At least one first conductive pattern [Figure 3: (45)] electrically connected to the first electrode of each of the lamps; and
 - At least two first through-holes [Figure 3: (46)] formed on the first insulated body, whereby each of the first through-holes receives the first electrode of each of the lamps.
5. With regards to Claim 3, Mazis discloses the lamp assembly including:
- A first connector [Figure 4: (40)] installed on the first conductive pattern; and
 - A first terminal [Figures 3-4: (38, 39)], coupled to the first conductive pattern through the first connector, for receiving the first discharge voltage.
6. With regards to Claim 6, Mazis discloses a first lamp holder [Figures 2-3: (33 or 37)] for preventing the first electrode from moving, whereby the end of the first lamp holder is connected to the first board.
7. With regards to Claim 7, Mazis discloses a second board [Figure 1: (24)], coupled to the second electrode for providing the second electrode with a second discharge voltage.

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8. With regards to Claim 8, Mazis discloses the second board [Column 3, Lines 2-5] including:

- A second insulated body [Figure 3: (44)]
- At least one second conductive pattern [Figure 3: (45)] electrically connected to the second electrode of each of the lamps; and
- At least two second through-holes [Figure 3: (46)] formed on the second insulated body, whereby each of the second through-holes receives the second electrode of each of the lamps.

9. With regards to Claim 9, Mazis discloses the lamp assembly [Column 3, Lines 2-5] including:

- A second connector [Figure 4: (40)] installed on the second conductive pattern; and
- A second terminal [Figures 3-4: (38, 39)], coupled to the second conductive pattern through the second connector, for receiving the second discharge voltage.

10. With regards to Claim 12, Mazis discloses a second lamp holder [Figures 2-3: (33 or 37); Column 3, Lines 2-5] for preventing the second electrode from moving, whereby the end of the second lamp holder is connected to the second board.

11. With regards to Claim 13, Mazis discloses the number of lamps being four [Figure 2].

12. Claims 29-30 and 33-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Mazis (U.S. Patent 4504891).

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13. With regards to Claim 29, Mazis discloses a lamp assembly including:
- At least two lamps inherently installed into sockets, whereby the lamps being of a fluorescent bulb type [Column 2, Lines 13-16], which are commonly known in the art and inherently provide a fluorescent layer formed on an inner surface of the lamp body, a discharge gas disposed in the body, first and second electrodes for providing the lamp body with discharge voltages; and
 - A first board [Figures 1-4: (23)] being coupled to the first electrode to provide a first discharge voltage, and further including:
 - = An insulated body [Figure 3: (44)];
 - = At least one conductive pattern [Figure 3: (45)] formed on the insulated body and electrically connected to the first electrode of each of the lamps; and
 - = At least two through-holes [Figure 3: (46)] formed on the insulated body, whereby each of the through-holes receives the first electrode of each of the lamps.
14. With regards to Claim 30, Mazis discloses the lamp assembly including:
- A connector [Figure 4: (40)] installed on the conductive pattern; and
 - A terminal [Figures 3-4: (38, 39)], coupled to the conductive pattern through the connector, for receiving the first discharge voltage.
15. With regards to Claim 33, Mazis discloses a lamp holder [Figures 2-3: (33 or 37)] for preventing the first electrode from moving, whereby the end of the lamp holder is connected to the first board.

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16. With regards to Claim 34, Mazis discloses the lamp assembly including a second board [Figure 1: (24)] coupled to the second electrode for providing a second discharge voltage.

17. With regards to Claim 35, Mazis discloses the first board being disposed such that a planar surface of the first board [Figure 2: (27)] is substantially perpendicular to a longitudinal direction of each of the lamps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazis (U.S. Patent 4504891) as applied to Claims 3 and 9, respectively above, and further in view of Park (U.S. Patent 6050704).

Mazis discloses the claimed invention as cited above, but does not specifically teach the first (second) terminal being connected to an inverter for generating the first (second) discharge voltage.

Park teaches such an inverter [Figure 1A: (16)] for providing voltage for illuminating a lamp [Figure 1A: (11); Column 1, Lines 66-67].

It is obvious that one ordinarily skilled in the art at the time of invention could have modified the lamp assembly of Mazis to incorporate the inverter of

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Park, which is commonly known within the art to provide power to a fluorescent lamp via changing direct-current power to alternating-current power.

19. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazis (U.S. Patent 4504891).

Mazis discloses the claimed invention as cited above, but does not specifically teach the first (second) electrode being received in each of the first (second) through-holes and the first (second) conductive pattern being soldered with each other and electrically connected to each other.

However, Mazis teaches, "In addition, the assembly includes a pair of ballast transformers with their own wires, and the wires of all of these various components must be interconnected by means of wire nuts, solder connections, or quick-wire connections [Column 1, Lines 24-28."

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp assembly of Mazis to incorporate the solder connections between the first (second) electrode and first (second) conductive pattern, so as to provide further support and prevent the electrode from moving within the assembly.

20. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazis (U.S. Patent 4504891) as applied to Claim 30 above, and further in view of Park (U.S. Patent 6050704).

Mazis discloses the claimed invention as cited above, but does not specifically teach the terminal being connected to an inverter for generating the first discharge voltage.

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Park teaches such an inverter [Figure 1A: (16)] for providing voltage for illuminating a lamp [Figure 1A: (11); Column 1, Lines 66-67].

It is obvious that one ordinarily skilled in the art at the time of invention could have modified the lamp assembly of Mazis to incorporate the inverter of Park, which is commonly known within the art to provide power to a fluorescent lamp via changing direct-current power to alternating-current power.

21. Claim 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazis (U.S. Patent 4504891).

Mazis discloses the claimed invention as cited above, but does not specifically teach the first electrode being received in each of the through-holes and the conductive pattern being soldered with each other and electrically connected to each other.

However, Mazis teaches, "In addition, the assembly includes a pair of ballast transformers with their own wires, and the wires of all of these various components must be interconnected by means of wire nuts, solder connections, or quick-wire connections [Column 1, Lines 24-28."

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp assembly of Mazis to incorporate the solder connections between the first electrode and conductive pattern, so as to provide further support and prevent said electrode from moving within the assembly.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

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See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (6/20/2005)


Stephen Husar
Primary Examiner